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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,592	11/29/2007	Jaroslav Abramczyk	NU-213WO-1	3593
38731	7590	09/16/2009	EXAMINER	
NUFERN			HELLNER, MARK	
7 AIRPORT PARK ROAD			ART UNIT	
EAST GRANBY, CT 06026			PAPER NUMBER	
			3663	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

hsamson@nufern.com

Office Action Summary	Application No. 10/597,592	Applicant(s) ABRAMCZYK ET AL.	
	Examiner Mark Hellner	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15, 19 and 27-30 is/are allowed.
- 6) ☒ Claim(s) 1-12, 16-18 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/2/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12, 16 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Koplow et al (2002/0159139).

Re claim 1:

Koplow et al disclose an optical apparatus for providing light having a selected linear polarization having a polarization ratio (title), the apparatus comprising a length of optical fiber (32) comprising a rare earth for providing light having a first wavelength responsive to receiving pump light (48) having a second wavelength that is different from the first wavelength.

Claim 1 recites the following functional language:

Wherein if said length of optical fiber were placed in a first position wherein the length of fiber is substantially linearly oriented the fiber could propagate at the first wavelength a fundamental mode and a plurality of higher order modes and the apparatus could provide light having a first polarization ratio for the selected linear polarization and an M^2 parameter, and wherein the length of fiber is positioned in a second that increases the bend loss of the fiber relative to the first position such that, responsive to the increased bend loss, the apparatus can provide light having a

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reduced $M(\text{squared})$ parameter relative to the $M(\text{squared})$ parameter as well as a second polarization ratio for the selected linear polarization that is increased relative to the first polarization ratio such that the second polarization ratio is, at least 6 dB greater than the first polarization ratio, and wherein when said length of fiber is in the second position the apparatus can provide a slope efficiency that is at least 50% of the ratio of the second wavelength to said first wavelength.

Claims 2-12 recite inherent properties of the structure applied to claim 1.

Re claims 16 and 21-25:

These claims essentially read on the structure applied to claims 1-12 and further specify detail about the structure of the doped fiber as supported by figures 4a, 5a and 6 of the present application.

This structure is also disclosed by figures 1-3 of Koplow et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koplow et al.

The difference between Koplow et al and the subject matter of claims 17, 18 and 20 is the use of grating reflectors to create a laser source.

It was notoriously well known to the skilled artisan that using reflectors to create a resonant cavity in an amplifying fiber results in a laser source.

Allowable Subject Matter

Applicant's arguments, see the amendment, filed 6/1/2009, with respect to claims 13-15, 19 and 27-30 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

Response to Arguments

Applicant's arguments filed 6/1/2009 with respect to claims 1-12, 16-18 and 20-26 have been fully considered but they are not persuasive.

In claim 1, the clause supporting the limitations that give life to applicant's arguments recites "wherein if said length of optical fiber were placed..."

This is a conditional statement that does not positively recite structure.

It is suggested that this language be amended to -- said optical fiber being placed --.

In claim 16, the language supporting applicant's arguments is prefaced by "being capable of".

It is suggested that this language be amended to -- being configured to --.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 571 272 6981.

/Mark Hellner/

Primary Examiner, Art Unit 3663